ABSTRACT OF THE DISCLOSURE

Disclosed herein is a via hole dry etching method using an organic SOG film as an interlayer dielectric having low-K. In the dry etching method, a mixed gas containing at least C4F8 and O2 is used as an etching gas and an O2/(C4F8+O2) mixture ratio is set to 50% or less, thereby to carry out via hole dry etching. Further, the via hole dry etching is carried out by using a mixed gas containing at least CF4, CHF3 and N2 and setting the quantity of flow of N2 to above 10% and below 80% of the quantity of flow of CF4+CHF3+N2.